This is our VVRC REPEATER print version. An expanded online version is available by free subscription. Go to w6vvr.net

REPEATER
REPEATER
REPEATER
REPEATER
REPEATER
REPEATER
REPEATER
REPEATER

VACAVALLEY RADIO CLUB

VACAVILLE , CALIFORNIA **March 2015**

Thursday, 12 February, 2015 VacaValley Radio Club Meeting Notes

VVRC President Frank – KJ6RWQ, called the Feb., 2015 meeting to order at 19:10 hr.

There was no finance report because our Finance Officer was absent.

VVRC past President, Mike – W6MAV, was scheduled to brief the membership regarding the Vine St. fire station, but was called away unexpectedly.

Frank brought the topic of the club's possible swap meet to the floor for open discussion and invited the membership to contribute ideas and suggestions. Although the session was quite lively and there were a lot of good suggestions, nothing really concrete was decided. A number of potential dates were posed, and VVRC past VP, Jerry – KD6WKY, then reminded the membership of a number of commitments and events already pre-set for 2015:

April is the annual DX convention in Visalia

June 6 is a the first of two scheduled VE test sessions to be held in Fairfield, and a half-dozen VVRC members will be officiating.

June 27 – 28 is the ARRL Field Day, and are we – the VVRC as a group – going to repeat last year's successful op?

July – Sept. normal VVRC meetings are suspended for Summer break.

October 3-4 is the annual CQP event, with VVRC members participating.

Dec. 5 is the second scheduled VE test session to be held in Fairfield.

Frank closed the discussion by asking the membership for one to be willing to step forward and commit to oversee and coordinate the whole swap meet.

Frank then introduced an idea that he had about hosting an informal H.F. net immediately following the Tuesday night VVRC 2M net, calling it the "Net Plus". It was suggested that we could meet up on the phone portion of the 10M (28 MHz) band, so that even our Technician rated members could participate on HF if they had the equipment. It was also suggested that if enough members had the equipment, the "Net Plus" concept could eventually be expanded to where we could also alternately rotate to 6M, 220MHz, or even 70cm.

Rounding out the evening, V.P. Kim – KI6JNX, gave a great hands-on demonstration of how to properly solder a coax connector.

With nothing left on the agenda, the meeting was closed at 20:20 Hr.

Skip, AF6HC

IN THIS ISSUE

Club Meeting Minutes----------1
ARRLSeeks Input on Band Plan----------2
Solar eclipse to disrupt power supplies --- 3
Digital Happenings----------4&5
Paperless Ham Lic now in effect---------- 5
Catching grow ops with radios----------5&6
Application and Misc----------8

VACA VALLEY RADIO CLUB--2013

ELECTED OFFICERS

President: Frank Garay, KJ6RWQ
Vice President: Kim, KJ6JNX
Secretary: Skip Lawson, AF6HC
Treasurer: Bob Hewitt, K6HEW

BOARD OF DIRECTORS

Director: Antonio DelRio, N6ZGB
Director: Chris Jones, KD7TQO
Director: Arthur Miller, KI6UXE
Director: Richard Craig, KJ6MIB

APPOINTED POSITIONS

Net Control Chairperson: Chris Jones, KD7TQO
Club Activities Chairperson: Board of Directors
Newsletter Editor: Jerry Bowen, KJ6SCC
Newsletter Publisher & Distributor: Bob Hewitt, K6HEW

ARRL Seeks Member Input on Draft HF Band Plan Proposals

The ARRL is asking members to comment by April 19 on possible
changes to the League's HF Band Plans suggested by the HF Band Planning Committee. The survey is part of the committee's efforts to tweak the band plans for the RTTY/data/CW portions of 80 through 10 meters - excepting 60 meters.

Band by Band Draft Recommendations

The committee suggests several modifications to the **80 meter band plan**.

The HF Band Planning Committee recommends that the League petition the FCC to move the boundary between the 80 meter RTTY/data band and
the 75 meter phone/image band from 3600 to 3650 kHz and restoring
that segment to General and Advanced class licensees.

* Shift the ACDS band segment from 3585-3600 to 3600-3615 kHz,
consistent with the IARU Region 1 and 2 band plans.

* Extend the current Novice/Technician CW segment of 3525-3600 kHz to 3650 kHz.

* Add 80 meter RTTY/data privileges for Novices and Technicians.

On 40 meters, the committee concluded that it would be unrealistic to try to bring the ARRL band plan into alignment with the rest of the world.

The committee proposes aligning the band plan with the "Considerate Operator's Frequency Guide," with wide data modes - outside of ACDS - at 7115-7125 kHz.

On 30 meters, the committee recommends confining wide data modes to 10.140-10.150 MHz, separated from other RTTY/data at 10.130-10.140
MHz.

On 20 meters, the committee recommends using the 1 kHz IARU/NCDXF beacon network frequency (14.0995-14.1005 MHz) as a line in the sand between wide ACDS in the 14.1005-14.112 MHz segment, and narrow ACDS in the 14.095-14.0995 MHz segment.

The committee recommends 14.070-14.095 MHz for RTTY and narrowband data, noting that so-called "weak-signal" data modes often are used between 14.070 and 14.078 MHz.

On 17 meters, the committee recommends confining wide data modes to the FCC-mandated ACDS segment of 18.105-18.110 MHz, separated from
narrow RTTY/data at 18.100-18.105 MHz. FCC rules do not permit RTTY/data above 18.110 MHz, limiting options for this band.

On 15 meters, the committee recommends that 21.070-21.090 MHz for narrow RTTY/data modes, the FCC-mandated ACDS segment of 21.090-21.100 MHz for both narrow and wide automatically controlled data station activity, and above 21.100 MHz for any additional wide data activity. The ARRL Board also wants members to comment on the desirability of adding RTTY/data privileges for Novices and Technicians in their existing 15 meter segment, where they're now limited to CW.

On 12 meters, the committee recommends confining wide data to the FCC-mandated ACDS segment, 24.925-24.930 MHz, separated from narrow
RTTY/data operation at 24.920-24.925 MHz. FCC rules do not permit RTTY/data operation above 24.930 MHz, limiting options for this band.

On 10 meters, the committee recommends that wide data be confined to the FCC-mandated ACDS segment, 28.120-28.189 MHz, separated from narrow RTTY/data modes at 28.070-28.120 MHz.

How to Comment

The League has set up a web page to record members' preferences and comments at, http://www.arrl.org/bandplan . Those wishing to offer
more detailed comments may e-mail ARRL at, Bandplan@arrl.org .

The comment deadline is April 19. The HF Band Planning Committee will
deliver its final report at the ARRL Board of Directors' July meeting.

NET CONTROL OPERATORS

1st week of month-Jerry Bowen; KJ6SCC
2nd week of month-Richard Craig; KJ6MIB
3rd week of month-Frank Garay; KJ6RWQ
4th week of month-Jerry Oliv, KD6WKY
On months with 5 weeks-Bob Hewitt; K6HEW

NASA recently put two Holsteins in orbit. They called it the herd shot around the world.

THE VVRC WELCOMES YOU

The Vaca Valley Radio Club has proudly served the Northern Solano County Area since 1988. We pride ourselves in providing a friendly place for radio amateurs to meet and improve their operating skills.

We participate in public service events throughout the year and are always ready to assist with communications during times of emergency.

Browsw our website for more information about our club. If you have any questions please e-mail us at w6vvr@w6vvr.net or call 707-448-5665 for assistance

The Repeater is Published by the Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625-0143, An ARRL Affiliated Club. Founded 1987, Chartered 1988. General Meetings: 2nd Thursday of each month at 7:30 PM 420 Elmira Fire Station.

Wheelchair accessible

Solar eclipse to disrupt power supplies
Eclipse to block out 95 per cent of sunlight in parts of Europe

Power supplies could drop suddenly next month when the UK is plunged into darkness with an eclipse of the sun.

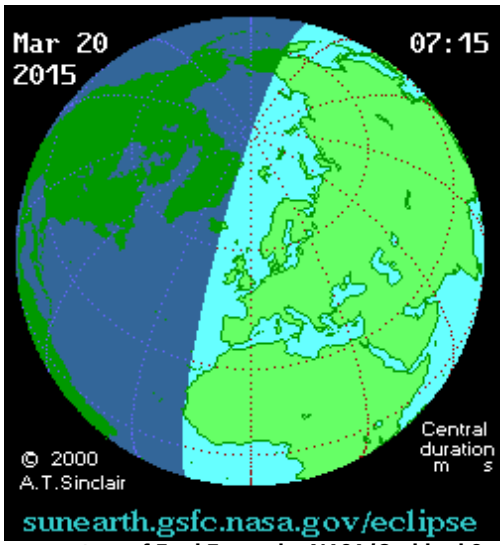
Energy experts warned there could be possible blackouts in the biggest solar eclipse since 1999.

Nearly 90 per cent of the sun's rays will be blocked out in parts of Europe on March 20.

In London and the South East, 85 per cent of the sun will be obscured by the moon whilst in northern Scotland, more than 95 per cent will be covered.

The National Grid has warned that solar power output in Britain will halve during the event.

It is unlikely to cause problems as so little electricity comes from solar power in the UK but other parts of Europe become plunged into darkness.



Eclipse map courtesy of Fred Espenak - NASA/Goddard Space Flight Center

The European Network Transmission System Operators for Electricity said: "The risk of incident cannot be completely ruled out. Solar eclipses have happened before but with the increase of installed photovoltaic energy generation, the risk of an incident could be serious without appropriate countermeasures."

The organisation said it had been planning for months so that suppliers across Europe provide more energy from other power stations during the hours that solar energy supplies are hit. Patrick Graichen, executive director of Agora Energiewende, a renewable energy think-tank in Berlin, said such events might become problematic in the future as more solar farms are built.

He told the Financial Times: "In a way March 20 is a glimpse into the future of our power systems."

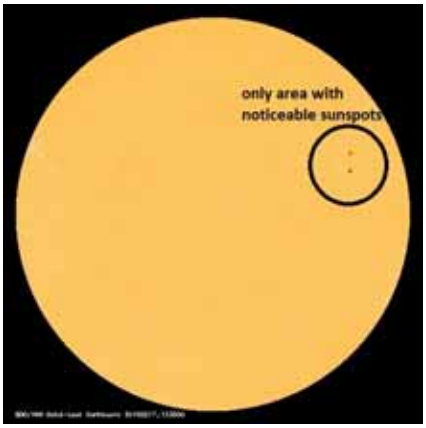
The eclipse will last around two hours from 8.40am. The next one will not be until 2026.

The UK's leading group for beginners to stargazing, the Society for Popular Astronomy, has made a video with practical tips on how to observe the eclipse safely. It is presented by Lucie Green, from the BBC's The Sky at Night.

Corona time: What the sky will look like in March

And here's one more little trick the sun is up to

The sun has gone quiet again during the weakest solar cycle in more than a century



[Latest solar image with little sunspot activity; courtesy "spaceweather.com"]

Digital happenings
by Marcus, KI6WDX

Thus far, the WMR RIGblaster Advantage seems to be a very good digital interface device in lieu of the position once held by the Tigertronics SignaLink USB device. When the Yaesu FT-950 rig shows up early next month, I haven't read nor heard of that rig having a super sensitive data port unlike its brother that being the FT-450 radio. So I guess I'll find out if the SignaLink USB device can work as well when connected to the FT-950 like the Advantage does with the FT-450 rig. While RTTY is mainly these days used for contesting, the Advantage vs. the SignaLink is that the WMR device can allow one to operate true FSK RTTY whereas with the SignaLink device, the RTTY has to be run as AFSK instead. So I guess I'll just have to wait & see how the old interface fares with the FT-950 radio next month.

Since the JT65-HF mode is addictive (it's very easy to get one's self hooked on it !!), the QRZ.com website is giving me a World Continent Mixed Award certificate for my confirmed QSO's I've logged in my logbook on their website. They have a couple of other awards of which I'm going to try for. So after the tax season is behind me this year, I'm going to log more QSO's into my logbook on their website and see what other awards I can garner. And after logging those QSO's, I'll be uploading my QSO's into the LoTW and await my W.A.S. SSB phone award that I know will be forthcoming. As for the JT65-HF mode, I only have 5 more states in order to claim my JT65 digital W.A.S. award. And I still must upload into the LoTW my PSK31 QSO's for I believe I have about 10 (+/-) states yet to go in pursuing the W.A.S. award for the PSK31 mode.

After I get my p/u truck repaired, I'm thinking of investing in a nice portable solar kit as offered from the Samlex America company. At the moment, I'm looking at their 135 watt model. They also have a 90 watt model, too. So I'm going to contact them with a few questions before deciding on either model. Their customer service is great as is their AC-to-DC power supply units and so I can't help but wonder about their portable solar kits. Add in 1 or 2 deep cycle marine batteries, a couple of WMR battery boxes and a new portable gasoline generator I've been looking at (it's literature states a 52 dB noise level), I could have a lotta fun out in the field at some spot up high in a mountain area somewhere in this state with my FT-450 and a few antennas to QSO with ?

And I found a website that explains in an easy-to-understand approach in using both the Olivia and Contestia digital modes found inside of the "once for free" HRD version with its DM-780 digital mode companion. I've always wondered about either program, but never could find out much about each until last night (Sunday Feb. 15th) for which I made sure to bookmark the website. But this coming new work week, I have to mail to both DXLab Suites and DX Atlas software owners since both seem to have a "bug" in them that can't be fixed by me. The "bug" is more of an annoyance if anything as the DX View portion of the DX Lab Suites works fine except I'm unable to do what I have been able to do with the program in the past, but can't these days due to the "bug" The "bug" problem is identical in the DX Atlas program despite a different owner.

Worked BG4DRL twice thus far. Once each using the 20 and 15 meter bands JT65-HF mode using just 35 & 30 watts respectively with the G5RV antenna I have here. Perhaps more ragchewing next month

Info for digestion

OK, working a station anywhere the signal might go with the G5RV antenna is nice and I've done several QSO's in the past to this area with much success be it SSB phone or digital. Was on the air tonight looking at maybe getting a QSO in an area I've not ventured into yet and no such luck tonight. But did a brief QSO with this operator pushing 40 watts to his station. No idea as to his power ouput. Power for the JT65-HF mode is generally between 20-40 watts unlike PSK31 which works at a lower power output.

Anyway, sometimes I get lucky since my G5RV can't be aimed in a particular direction unlike those hams who have a beam coupled to a rotator. So my 40 watts to this station tonight might help you decide in case you've been pondering taking a swim with the digital mode: **VK7XX**

Visit the Repeater online courtesy of Bob K6HEW at: vacavalleyradio.net

Club repeater in Vacaville:W6VVR 145.470 MHz(-) pl 127.3
The W6VVR net call is Tuesday evenings at 8pm on the club repeater. All are invited to participate in this weekly meeting on the air. 73!

Additional local repeaters
WV6F 224.200(-)
WV6F 440.025(+)
WV6F 1291.900(-)

Our signal report consisted of his signal to me in being a very weak signal rated at -21 dB whereas my signal to him was rated at -02 which is & was a very strong signal. What this means is that the lower the number is a very strong clean signal and the higher the number indicates a very weak and difficult signal to decode with the software program.

So when I finally put up that hex beam I've talked about, I'm guessing that instead of the usual 30 watts of output power I normally use will likely be down around 10 watts or thereabouts since a directional (beam) antenna is better able to focus and direct the signal in a particular direction unlike the "wherever" approach the G5RV works at doing. And using an external tuner also helps, too!

I only need 3 more USA states to get my JT65-HF digital W.A.S. award. The PSK31 mode still has a way to go for the other W.A.S. award.

7 **3, Marcus, KI6WDX**

FCC "Paperless" Amateur Radio License Policy Now in Effect

ARRL Bulletin 7 ARLB007
From ARRL Headquarters
Newington CT February 17, 2015

To all radio amateurs

Starting today, February 17, the FCC no longer routinely issues paper license documents to Amateur Radio applicants and licensees.

The Commission maintains that the official Amateur Radio license authorization is the electronic record that exists in its Universal Licensing System (ULS), although the FCC had routinely continued to print and mail hard copy licenses until this week.

In mid-December, the FCC adopted final procedures to provide access to official electronic authorizations, as it had proposed in WT Docket 14-161 as part of its "process reform" initiatives. Under the new procedures, licensees will access their current official authorization ("Active" status only) via the ULS License Manager.

The FCC will continue to provide paper license documents to all licensees who notify the Commission that they prefer to receive one.

Licensees will also be able to print out an official authorization - as well as an unofficial "reference copy" - from the ULS License Manager.

"We find this electronic process will improve efficiency by simplifying access to official authorizations in

---------->

ULS, shortening the time period between grant of an application and access to the official authorization, and reducing regulatory costs," the FCC Wireless Telecommunications Bureau (WTB) said. According to the WTB, the new procedures will save at least $304,000 a year, including staff expenses.

How cops are catching marijuana grow ops with AM radios

Many ham operators can locate a grow simply by taking a radio and portable antennae out into their neighborhood and using the radio to triangulate the exact location of the grow

With the proliferation of indoor marijuana grows, the indoor "horticulture" industry has been booming. Chinese manufacturers are turning out indoor grow equipment at a rapid pace with little to no regulatory oversight or compliance. Because of this, there has been a significant amount of radio frequency interference (RFI).

Before we get into how to detect a marijuana grow with your car radio, you have to understand some simple mechanics of how a grow operates. To grow marijuana indoors, you need supplemental lighting necessary for photosynthesis. These lights may be fluorescent, LED, and for larger operations, high pressure sodium (HPS) or metal halide (MH).

The HPS and MH lamps may be 1000W per lamp and require a ballast for proper operation. These ballasts were originally magnetic but in the past few years have become electronic. These devices are subject to FCC part 18 rules but there appears to be a total disregard for the FCC rules. Many (if not most) electronic ballasts are manufactured in China and may have little 'FCC' stickers on them but there is no evidence of any testing for compliance having been done. Because of this, a large amount of RFI is interfering with nearby electronics. As an example, one grow next to a CalFire station — California's state fire agency — caused a continuous hum over the station's callbox speaker and interfered with them receiving radio broadcasts over their station's PA.

Ham Radio Helpers

Reports have begun to flood into the National Association for Amateur Radio about interference with their ham radios from their neighbor's marijuana grows. The most complaints come from California and Colorado, for obvious reasons. Many ham radio operators began to see a correlation with marijuana grows and this RFI.

One amateur radio operator located five marijuana grows near his house due to RFI alone! Many ham

Contined on page 6---------->

operators can locate a grow simply by taking a radio and portable antennae out into their neighborhood and using the radio to triangulate the exact location of the grow.

One industrious ham operator went to his local grow shop and borrowed several lights and ballasts to test for RFI. He found that one light and ballast set up would cause interference up to 700 meters. From our experience, we know that most indoor grows have more than one light and ballast, which would amplify the RFI.

Pioneering Field Use

One narcotics officer from the San Francisco Bay Area turns his car radio to 560 AM when he checks out potential indoor grows. He's checked out seven indoor marijuana grows since learning about the RFI issue. All seven times, the car's radio showed significant interference from the ballasts inside of the grow location.

One ham radio operator described the interference this way: "It can be pops, it can be a buzzing sound, whistles — just all kinds of different noises that we'll hear."

Tom Thompson, a ham radio operator, told a Colorado newspaper, "If I can track this down, anybody can track this down. If I listen long enough, I can tell when they turn the lights off... You can tell exactly when the harvest is."

This method of finding marijuana grows isn't fool proof, but it can be another useful tool in your toolbox.

Three friars were behind in their belfry payments; so they opened up a small florist shop to raise the funds. The rival florist across town thought the competition was unfair. He asked the good fathers to close down, but they would not.He went back and begged the good fathers to close.

They ignored him. So, the rival florist hired Hugh McTaggart, the roughest and most vicious thug in town to "persuade" them to close. Hugh beat up the friars and trashed their store, saying he'd be back if they didn't close up shop.Terrified, they did so, thereby proving that Hugh, and only Hugh, - can prevent florist friars.

PLEASE RENEW YOUR MEMBERSHIP

VACAVALLEY RADIO CLUB, INC.

MEMBERSHIP APPLICATION / RENEWAL FORM

Please Print & Fill in Completely Dues are delinquent January 1st

Name: _____ Call Sign_____

Street:
_____

City: _____Zip:
_____

Phone: (_____) _____-_____OK to Publish ?(_____)

License Class: _____ ARRL Member ?(_____)

E-Mail
Address_____

FAMILY Member (Spouse or Children)

Name: _____ Call Sign_____
License Class: _____ARRL Member ?(_____)

Name: _____ Call Sign_____
License Class: _____ARRL Member ?(_____)

MEMBER Dues	$20.00	_____
Each Family Member	$ 2.00	_____
Student	$ 5.00	_____
Repeater/Autopatch donation		_____
Call/Name badge	$11.00	_____
Optional ARRL membership		
ARRL dues	$37.00	
Total		_____

Paid by CASH: Check # _____

DATE: _____

Mail to : Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625-0143